GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH
LOK SABHA
UNSTARRED QUESTION NO. 3452
(TO BE ANSWERED ON 02.01.2019)

ETHNO MEDICAL RESEARCH CENTRE

3452. SHRI OM PRAKASH YADAV:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Government proposes to open Ethno Medical Research Centres in the country;
(b) if so, the details thereof and the number of proposals received by the Government for opening such centres in the State of Bihar;
(c) the number of herbal medicines included in the list for scientific recognition by the Ethno Medical Research Centre; and
(d) the details of list of recognised herbal medicines?

ANSWER
MINISTER OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES
(Dr Harsh Vardhan)

(a)&(b) An 'Ethno Medical Research Centre' has been set up in Manipur by Indian Council of Agricultural Research (ICAR) to study the wild herbs available in the North Eastern Region for their medicinal properties. The research centre was inaugurated in August, 2017 within the campus of Foundation for Environment & Economic Development Services (FEEDS), an NGO near Krishi Vigyan Kendra (KVK) at Hengbung village in Kangpokpi district of Manipur. The centre will identify the medicinal plants, extract herbs, study the chemical composition of the extracts and sell them to various pharmaceutical companies.

The Government has not received any proposal for opening such centres in the State of Bihar.

(c) According to the experts, there are about 430 species of herbs with medicinal value in the north east region and out of these, 108 species are found in Manipur. The Ethno Medical Research Centres will conduct research on traditional method of healing using these herbs.

(d) A prioritized list of medicinal plants for cultivation has been notified by National Medicinal Plants Board and a number of research studies and surveys have been undertaken to identify the medicinal use of herbs as given in Annexure-1.

Annexure -1

Some well-known Indian medicinal plants and their uses

Botanical name	Parts used	Therapeutic uses
Acorus calamus Linn (Araceae)	Rhizome	Nervine tonic, anti-spasmodic (Satyavati et al., 1976; Bose et al., 1960)
Aegle marmelos (L.) Corr. (Rutaceae)	Fruit	Hypoglycemic; chemopreventive (Vyas et al., 1979; Dixit et al., 2006)
Allium sativum Linn (Alliaceae)	Bulbs	Anti-inflammatory; anti-hyperlipidemic, fibrinolytic (Dixit et al., 2006)
Aloe barbadensis Mill., and ***Aloe vera*** Tourn. Ex Linn. (Alliaceae)	Gel	Skin diseases- mild sunburn, frostbite, scalds; wound healing (Baliga, 2006)
Andrographis paniculata (Burm.f.) Wallich ex Nees (Acantahceae)	Whole plant	Cold; flu – hepatoprotection (Koul and Kapil-1994; Sharma et al., 2002a)
Asparagus racemosus Willd (Alliaceae)	Roots	Adaptogen, galactogogue (Dahanukar et al., 1997; Gupta and Mishra, 2006)
Bacopa monnieri (L) Pennel (Scorphulariaceae)	Whole plant	Anti-oxidant; memory enhancing (Singh and Dhawan, 1997)
Berberis aristata DC (Berberidaceae)	Bark, fruit, root, stem, wood	Anti-protozoal, hypoglycemic, anti-trachoma (Dutta and Iyer, 1968; Sharma et al., 2000a)
Boerhavia diffusa L. (Nyctaginaceae)	Roots	Diuretic; anti-inflammatory and anti-arthritic (Sharma et al., 2000b; Harvey, 1966)
Boswellia serrata Roxb. (Burseraceae)	Oleo resin	Anti-rheumatic; anti-colitis and anti-inflammatory, anti-cancer. (Sharma et al., 2000c)
Butea monosperma (Lam.) Taub (Fabaceae)	Bark, leaves, flowers, seeds and gum	Adaptogen; abortifacient, anti-oestrogenic, anti-gout, anti-ovulatory (Sharma et al., 2000d)
Calotropis gigantea (Linn) R. Br. (Asclepiadaceae)	Flowers, whole plant, root, leaf	Anti-inflammatory, spasmolytic, asthma (Sharma et al., 2000e)
Callicarpa macrophylla Vahl. (Verbenaceae)	Leaves, roots	Uterine disorders (Sood, 1995)
Cassia fistula Linn (Leguminosae)	Resin	Laxative, anti-pyretic, worm infestation (Joshi, 1998)

Botanical name	Parts used	Therapeutic uses
Celastrus paniculatus **Willd (Celastraceae)**	**Whole plant**	**Brain tonic; memory enhancer; in the treatment of depression (Tanuja Doshi, 1991; Joglekar and Balwani, 1967)**
Centella asiatica **(Linn) Urban (Umbelliferae)**	**Whole plant**	**Tranquilizer; memory enhancer; wound healing- (Sharma et al., 2000 f; Suguna et al., 1996)**
Chlorophytum boriavillianum **Santapau & RR Fernandus (Alliaceae)**	**Roots**	**Aphrodisiac (Farooqi et al., 2001)**
Cissus quadrangularis **L (Vitaceae)**	**Whole plant, root, stem and leaf**	**Bone fracture; inflammation (*Deka* et al., 1994) (Udupa & Prasad, 1964b)**
Clerodendrum serratum **(Linn) Moon (Verbenaceae)**	**Root, leaf, Stem**	**Malaria; anti-asthmatic, anti-allergic (Gupta and Gupta, 1967) (Sivarajan and Balachandran 1999a)**
Commiphora mukul **(Hooker Stedor) Engl. (Burseraceae)**	**Resin**	**Hypolipidemic; obesity, rheumatoid arthritis (Satyavati, 1991)**
Crateva nurvala **Buch-Ham (Capparidaceae)**	**Stem bark, leaf**	**Urinary disorders including stones (Anand et al., 1995)**
Crocus sativus **Linn (Iridaceae)**	**Stigma**	**Aphrodisiac, anti-stress, anti-oxidant (Billore et al., 2004a)**
Curculigo orchioides **Gaertn. (Amaryllidaceae)**	**Root stock**	**Spermatogenesis enhancer (Joshi, 2005)**
Curcuma longa **Linn (Zingiberaceae)**	**Rhizome**	**Anti-inflammatory, wound healing enhancer; chemopreventive agent; anti-oxidant, anti-cancer (Tripathi et al., 1973), (Narasimhan et al., 2006)**
Desmodium gangeticum **(Linn) DC (Papillionaceae)**	**Root**	**Anti-oxidant; anti-rheumatic- (Sharma et al., 2001a) (Govindarajan and Vijayakumar-2006)**
Eclipta alba **(Linn) Hask (Compositae)**	**Whole plant**	**Hepatoprotecive / promotes hair growth (Chandra et al., 1987)**
Emblica officinalis **Gaertn. (Euphorbiaceae)**	**Fruit**	**Adaptogen, anti-oxidant (Vyas and Apte-1977; Rao and Siddiqui 1964).**
Eugenia jambolana **Lam. (Myrtaceae)**	**Seed, bark, leaf**	**Hypoglycemic, anti-inflammatory, anti-diarrhoeal, anti-pyretic. (Sharma et al., 2001b)**
Ficus religiosa **Linn (Urticaeae)**	**Bark**	**Anti-ulcer (gastric ulcer); anti-inflammatory,**

Botanical name	Parts used	Therapeutic uses
		hypoglycemic agent- (Ambike and Rao, 1967; Sharma et al., 2001c)
Gymnema sylvestre R. Br. (Asclepiadaceae)	Roots and leaves	Anti-diabetic; anti-hyperglycemic (Narasimhan et al., 2006)
Gloriosa superba Linn (Liliaceae)	Tuber	Spasmolytic, oxytocic; source plant for colchicine- (Sharma et al., 2002b)
Glycyrrhiza glabra Linn (Papillionaceae)	Stem	Expectorant; peptic ulcer treatment (Mitra and Rangesh, 2004a)
Hedychium spicatum Buch- Ham. Ex. Smith (Zingiberaceae)	Rhizome	Soothening, Expectorant, anti-tussive Anti-asthmatic (Chaturvedi and Sharma, 1975)
Hippophae rhamnoides L (Elaeagnaceae)	Fruits	Extensively used in the treatment of circulatory disorders, wound healing enhancer, duodenal ulcer etc. (Arora et al., 2006)
Holarrhena antidysenterica (Linn) Wall ex DC (Apocynaceae)	Stem bark, leaf, seed	Anti-spasmodic, anti-colitis, hypoglycemic. (Mitra and Rangesh, 2004b)
Inula racemosa Hk.f (Asteraceae; Compositae)	Roots	Used in gastro intestinal disorders, diuretic, expectorant and allergic disorders etc (Mishra, 2004a)
Leptadenia reticulata (Retz.) Wt. & Arn. (Asclepiadaceae)	Root, leaf, fruit	Galactogogue, vasodilator, anabolic. (Anjaria et al., 1975)
Momordica charantia Linn (Cucurbitaceae)	Root, leaf, fruit, seed	Anti-diabetic (Ahmad et al., 2001)
Mucuna pruriens (Linn.) DC (Fabaceae; Papilionaceae)	Seeds, root, leaf	Parkinson's disorder, Male sexual disorders. (Nath et al., 1981; Satyavati et al., 1987c)
Myristica fragrans Houtt (Myristicaceae)	Seed, aril, oil	Aphrodisiac, hypolipidemic, anti-inflammatory (Sharma et al., 2002c)
Ocimum sanctum Linn (Lamiaceae)	Whole plant, root, leaf, seed	Adaptogen; anti-oxidant, hypoglycemic, immunomodulator, radio-protector (Uma Devi, 2006)
Oroxylum indicum (Linn) Vent. (Bignoniaceae)	Root, root bark, leaf, fruit, seed	Anti-inflammatory, Diuretic (Gujral et al., 1955)
Phyllanthus amarus Schum. And Thonn. (Euphorbiaceae)	Whole plant	Hepatoprotective (Premalatha Balachandran and Rajgopal Govindarajan, 2004)

Botanical name	Parts used	Therapeutic uses
Picrorhiza kurroa Royle ex. Benth (Scorphulariaceae)	Tubers	Hepatoprotective; adaptogen. (Narasimhan et al., 2006)
Piper longum Linn (Piperaceae)	Fruit, root	Cough, asthma, fever (Satyavati et al., 1987a; Kohli and Salma Aiman, 2006)
Piper nigrum Linn (Piperaceae)	Fruit	Cough, asthma, fever (Satyavati et al., 1987a)
Plumbago zeylanica Linn (Plumbaginaceae)	Root, root bark	Anti-pyretic, anti-cancer, anti-coagulant, cytotoxic. (Sharma et al., 2000g); Krishnaswamy and Purushothaman, 1980)
Pterocarpus marsupium Roxb. (Fabaceae)	Bark, leaves, gum, flower	Hypoglycemic, anti-fungal. (Pandey and Sharma, 1975; Satyavati et al., 1987b)
Pueraria tuberosa (Roxb. Ex Willd). DC (Fabaceae)	Tuberous root	Anti-implantation, estrogenic, anti-inflammatory, dysmenorrhoea, DUB. (Billore et al., 2004b)
Rubia cordifolia L (Rubiaceae)	Root	Anti-inflammatory, anti-tumor, hypoglycemic etc.(Sharma et al., 2002d)
Rauvolfia serpentina Benth (Apocynaceae)	Root	Hypertension; mental disorders (Kohli and Salma Aiman, 2006) (Chauhan et al., 2006)
Saraca asoca (Roxb.) de Wilde (Caesalpiniaceae)	Stem bark, flower, seed	Post menopausal syndrome and Gynecolo-gical disorders (Narasimhan et al., 2006; Manjusha Vinjamury et al., 2004)
Saussurea lappa (Decne,) Sch. Bip (Asteraceae)	Roots	Analgesic; aphrodisiac; asthma (Chaurasia, 2006)
Solanum xanthocarpum Sch. And Wendl. Syn ***S. virginianum*** Linn (Solanaceae)	Whole plant	Asthma and related respiratory disorders (Sinha et al., 2006)
Swertia chirata Buch- Ham (Gentianaceae)	Whole plant	Anti-malarial; hypoglycemic; febrifuge etc (Dixit et al., 2006; Hamsaveni Gopal et al., 1981).
Symplocos racemosa Roxb. (Symplocaceae)	Bark	Anti-diarrhoeal (Sharma et al., 2002e)
Taxus baccata Linn (Taxaceae)	Source of taxol	Used in the treatment of metastatic breast cancer (Chauhan et al., 2006)
Tecomella undulata (Sm.) Seem. (Bignoniaceae)	Bark, seeds	Anti-bacterial, hypoglycemic, hepatoprotective (Billore et al., 2004c)

Botanical name	Parts used	Therapeutic uses
Terminalia arjuna (Roxb.) Wt. & Arn. (Combretaceae)	Bark	Heart diseases (Karunakaran Gauthaman and Mishra, 2004)
Terminalia chebula Retz., and ***Terminalia bellerica*** Roxb. (Combretaceae)	Fruits	Laxative, anti-oxidants (Narasimhan et al., 2006)
Terminalia arjuna (Roxb.) Wt. & Arn. (Combretaceae)	Bark	Heart diseases (Karunakaran Gauthaman and Mishra, 2004)
Tinospora cordifolia (Willd.) Hook.f. and Thoms., (Menispermaceae)	Stem	Adaptogen, immunomodulator. (Dahanukar et al., 1997; Thatte et al., 1994)
Tribulus terrestris Linn. (Zygophyllaceae)	Whole plant	Diuretic, anti-urolithiatic, cytoprotective (Chakraborty and Neogi 1978; Sangeetha et al., 1993)
Vetiveria zizanioides (L.) Nash (Poaceae)	Root	Vetiver oil for cosmetics. (Suhsil Kumar et al., 1997)
Vitex negundo Linn (Verbenaceae)	Leaves, root, bark, flowers, seed	Anti-inflammatory, anti-arthritic, immunodmodulator (Nair and Saraf, 1995)
Withania somnifera (Linn.) Dunal (Solanaceae)	Root	Adaptogen, anti-rheumatic etc. (Singh and Sushil Kumar, 1998).
Zingiber officinale Rosc (Zingiberaceae)	Rhizome	Fever, cough, asthma; anti-emetic (Sharma et al, 2002f)

Ref: "Indian Systems of Medicine: A Brief Profile" by B Ravishankar and VJ Shukla - published online 2007 Feb 16 in African Journal of Traditional Complementary and Alternative Medicines.

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